AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF THE CLAIMS

1. (Currently amended) A torque measuring apparatus comprising:

a rotor having a hollow body portion formed between a drive-side flange portion and a load-side flange portion;

light emitting elements disposed on a periphery of the rotor, for emitting optical signals based on an output from a torque detection unit arranged on a hollow portion of the hollow body portion;

a diffusion means for diffusing the optical signals; ~~and~~

a light receiving fiber attached to a chassis disposed outside the rotor, for receiving the optical signals via the diffusion portion, the light receiving fiber having L-shaped curved portions at each end;

a shielding plate arranged between each of the L-shaped curved portions and the light emitting elements; and

optical high pass filters, each filter positioned between one end of the light receiving fiber and a respective optical signal conversion unit.

2. (Currently amended) The torque measuring apparatus according to claim 1, wherein the ~~diffusionmeans~~ diffusion means comprises a diffusion plate mounted on a portion of the chassis opposing to the rotor for diffusing optical signals.

3. (Original) The torque measuring apparatus according to claim 1, wherein the diffusion means comprises a diffusion layer disposed on a surface of the light receiving fiber.

4. (Currently amended) A torque measuring apparatus comprising:

a rotor having a hollow body portion formed between a drive-side flange portion and a load-side flange portion;

light emitting elements disposed on a periphery of the rotor, for emitting optical signals based on an output from a torque detection unit arranged on a hollow portion of the hollow body portion; ~~and~~

a light guiding plate attached to a chassis disposed outside the rotor, for receiving the optical signals in a planar portion thereof and guiding the optical signals along the planar portion;

a shielding plate arranged between the light guiding plate and the light emitting elements; and

optical high pass filters, each filter positioned between one end of the light guiding plate and a respective optical signal conversion unit.

5. (New) The torque measuring apparatus according to claim 1, further comprising a rotary transformer including:

a primary coil including a half structured annular portion, the half structured annular portion including a first semi-annular portion and a second semi-annular portion whose upper ends are connected by a conductive connecting member, and whose remaining ends are fixed in an insulated state; and

a secondary coil on the periphery of the load-side flange portion.

6. (New) A torque measuring apparatus comprising:

a rotor having a hollow body portion formed between a drive-side flange portion and a load-side flange portion;

at least one light emitting element disposed on a periphery of the rotor, for emitting an optical signal based on an output from a torque detection unit arranged on a hollow portion of the hollow body portion;

a light guiding plate attached to a chassis disposed outside the rotor, for receiving the optical signal in a planar portion thereof and guiding the optical signal along the planar portion;

a shielding plate arranged between the light guiding plate and the at least one light emitting element;

at least one optical high pass filter, the at least one filter being positioned between one end of the light guiding plate and at least one optical signal conversion unit; and

a rotary transformer including:

a primary coil including a half structured annular portion, the half structured annular portion including a first semi-annular portion and a second semi-annular portion whose upper ends are connected by a conductive connecting member, and whose remaining ends are fixed in an insulated state; and

a secondary coil located on the periphery of the load-side flange portion.